

SUNESIS.001A



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

#5  
PATENT  
RECEIVED  
APR 23 2002  
TECHNICAL CENTER 1600/29001

Applicant : Erlanson et al. ) Group Art Unit 1626  
App. No. : 09/990,421 )  
Filed : November 21, 2001 )  
For : AN EXTENDED )  
THETHERING APPROACH )  
FOR RAPID )  
IDENTIFICATION OF )  
LIGANDS )

Examiner : Unknown

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents  
Washington, D.C. 20231

Dear Sir:

Enclosed is form PTO-1449 listing 48 references that are also enclosed. This Information Disclosure Statement is being filed before the receipt of a first Office Action on the merits, and presumably no fee is required in accordance with 37 C.F.R. § 1.97(b)(3). If a first Office Action on the merits was mailed before the mailing date of this Statement, the Commissioner is authorized to charge the fee set forth in 37 C.F.R. § 1.17(p) to Deposit Account No. 11-1410.

Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

Dated: January 24, 2002

By: [Signature]  
Ginger R. Dreger  
Registration No. 33,055  
Attorney of Record  
620 Newport Center Drive  
Sixteenth Floor  
Newport Beach, CA 92660  
(415) 954-4114

FORM PTO-1449

U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.  
SUNESIS.001AAPPLICATION NO.  
09/990,421INFORMATION DISCLOSURE STATEMENT  
BY APPLICANT

(USE SEVERAL SHEETS IF NECESSARY)

APPLICANT  
Erlanson, et al.FILING DATE  
November 21, 2001GROUP  
1636RECEIVED  
APR 28 2002  
TECH CENTER 1600/2900

## U.S. PATENT DOCUMENTS

| EXAMINER<br>INITIAL |    | DOCUMENT NUMBER | DATE    | NAME          | CLASS | SUBCLASS | FILING DATE<br>(IF APPROPRIATE) |
|---------------------|----|-----------------|---------|---------------|-------|----------|---------------------------------|
|                     | 1. | 4,946,778       | 8/7/90  | Ladner et al. | 435   | 69.6     |                                 |
|                     | 2. | 5,422,281       | 6/6/95  | Harris et al. | 436   | 501      |                                 |
|                     | 3. | 5,571,681       | 11/5/96 | Janda         | 435   | 7.6      |                                 |
|                     | 4. | 5,783,384       | 7/21/98 | Verdine       | 535   | 6        |                                 |
|                     | 5. | 5,958,702       | 9/28/99 | Benner        | 435   | 7.1      |                                 |
|                     |    |                 |         |               |       |          |                                 |
|                     |    |                 |         |               |       |          |                                 |
|                     |    |                 |         |               |       |          |                                 |
|                     |    |                 |         |               |       |          |                                 |
|                     |    |                 |         |               |       |          |                                 |

## FOREIGN PATENT DOCUMENTS

| EXAMINER<br>INITIAL |     | DOCUMENT NUMBER | DATE     | COUNTRY | CLASS | SUBCLASS | TRANSLATION |    |
|---------------------|-----|-----------------|----------|---------|-------|----------|-------------|----|
|                     |     |                 |          |         |       |          | YES         | NO |
|                     | 6.  | EP 0 801 307    | 10/15/97 | EP      |       |          |             |    |
|                     | 7.  | WO 95/18972     | 7/13/95  | PCT     |       |          |             |    |
|                     | 8.  | WO 95/25737     | 9/28/95  | PCT     |       |          |             |    |
|                     | 9.  | WO 96/13613     | 5/9/96   | PCT     |       |          |             |    |
|                     | 10. | WO 96/27605     | 9/12/96  | PCT     |       |          |             |    |
|                     | 11. | WO 97/12897     | 4/10/97  | PCT     |       |          |             |    |
|                     | 12. | WO 97/35202     | 11/20/97 | PCT     |       |          |             |    |
|                     | 13. | WO 97/43302     | 11/20/97 | PCT     |       |          |             |    |
|                     | 14. | WO 98/11436     | 3/19/98  | PCT     |       |          |             |    |
|                     | 15. | WO 98/11437     | 3/19/98  | PCT     |       |          |             |    |
|                     | 16. | WO 98/15969     | 4/16/98  | PCT     |       |          |             |    |
|                     | 17. | WO 98/25146     | 6/11/98  | PCT     |       |          |             |    |

EXAMINER

DATE CONSIDERED

\*EXAMINER: INITIAL IF CITATION CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP 609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED, INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.

|  |  |                                  |                               |
|--|--|----------------------------------|-------------------------------|
| FORM PTO-1449                                    | U.S. DEPARTMENT OF COMMERCE<br>PATENT AND TRADEMARK OFFICE | ATTY. DOCKET NO.<br>SUNESIS.001A | APPLICATION NO.<br>09/990,421 |
| INFORMATION DISCLOSURE STATEMENT<br>BY APPLICANT |  | APPLICANT<br>Erlanson, et al.    |                               |
| (USE SEVERAL SHEETS IF NECESSARY)                |  | FILING DATE<br>November 21, 2001 | GROUP<br>1636                 |

RECEIVED  
APR 23 2002  
TECH CENTER 1600/29001

| FOREIGN PATENT DOCUMENTS |     |                 |          |         |       |          |             |    |
|--------------------------|-----|-----------------|----------|---------|-------|----------|-------------|----|
| EXAMINER<br>INITIAL      |     | DOCUMENT NUMBER | DATE     | COUNTRY | CLASS | SUBCLASS | TRANSLATION |    |
|                          |     |                 |          |         |       |          | YES         | NO |
|                          | 18. | WO 98/56028     | 12/10/98 | PCT     |       |          |             |    |
|                          | 19. | WO 99/50668     | 10/07/99 | PCT     |       |          |             |    |
|                          | 20. | WO 99/50669     | 10/7/99  | PCT     |       |          |             |    |
|                          | 21. | WO 99/63944     | 12/16/99 | PCT     |       |          |             |    |
|                          | 22. | WO 00/00823     | 1/6/00   | PCT     |       |          |             |    |
|                          | 23. | WO 00/03240     | 1/20/00  | PCT     |       |          |             |    |
|                          | 24. | WO 01/02856     | 1/11/01  | PCT     |       |          |             |    |
|                          |     |                 |          |         |       |          |             |    |

| EXAMINER<br>INITIAL | OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.) |   |
|---------------------|--|---|
|                     | 25.  | Abraham, D.J. et al., "How Allosteric Effectors Can Bind to the Same Protein Residue and Produce Opposite Shifts in the Allosteric Equilibrium" <u>Biochemistry</u> 34:150006-15020 (1995)          |
|                     | 26.  | Boyiri, T. et al., "Bisaldehyde Allosteric Effectors as Molecular Ratchets and Probes" <u>Biochemistry</u> 34:15021-15036 (1995)  |
|                     | 27.  | Bunyapaiboonsri et al., "Dynamic Deconvolution of a Pre-Equilibrated Dynamic Combinatorial Library of Acetylcholinesterase Inhibitors" <u>ChemBioChem</u> 2:438-444 (2001)                          |
|                     | 28.  | DeJarias et al., "Use of X-ray Co-crystal Structures and Molecular Modeling to Design Potent and Selective Non-peptide Inhibitors of Cathepsin K" <u>J. Am. Chem. Soc.</u> 120(35):9114-9115 (1998) |
|                     | 29.  | Erlanson et al., "Site-Directed ligand discovery" <u>PNAS</u> 97(17):9367-9372 (August 15, 2000)  |
|                     | 30.  | Foroozesh et al. "Aryl Acetylenes as Mechanism-Based Inhibitors of Cytochrome P450-Dependent Monooxygenase Enzymes" <u>Chem. Res. Toxicol.</u> 10(1):91-102   |
|                     | 31.  | Hopkins et al., "Suicide Inhibitor of Cytochrome P450 1A1 and P450 2B1" <u>Biochem. Pharmacol.</u> 44(4):787-796 (1992)   |
|                     | 32.  | Huc and Lehn, "Virtual combinatorial libraries: Dynamic generation of molecular and supramolecular diversity by self-assembly" <u>Proc. Natl. Acad. Sci. USA</u> 94:2106-2110 (March 1997)          |
|                     | 33.  | Jones and Thornton, "Principles of protein-protein interactions" <u>Proc. Natl. Acad. Sci. USA</u> 93:13-20 (January 1996)  |
|                     | 34.  | Lehn, Jean-Marie, "Dynamic Combinatorial Chemistry and Virtual Combinatorial Libraries" <u>Chem. Eur. J.</u> 5(9):2455-2463 (1999)  |
|                     | 35.  | Maly et al., "Combinatorial target-guided ligand assembly: identification of potent sybtype-selective c-Src inhibitors" <u>PNAS</u> 97(6):2419-2424 (March 14, 2000)                                |

|   |                 |
|---|-----------------|
| EXAMINER  | DATE CONSIDERED |
| <p>*EXAMINER: INITIAL IF CITATION CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP 609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED, INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.</p> |                 |

|  |  |                                  |                               |
|--|--|----------------------------------|-------------------------------|
| FORM PTO-1449                                    | U.S. DEPARTMENT OF COMMERCE<br>PATENT AND TRADEMARK OFFICE | ATTY. DOCKET NO.<br>SUNESIS.001A | APPLICATION NO.<br>09/990,421 |
| INFORMATION DISCLOSURE STATEMENT<br>BY APPLICANT |  | APPLICANT<br>Erlanson, et al.    |                               |
| (USE SEVERAL SHEETS IF NECESSARY)                |  | FILING DATE<br>November 21, 2001 | GROUP<br>1636                 |

RECEIVED  
 APR 23 2002  
 TECH CENTER 1600/2900

| EXAMINER<br>INITIAL | OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)   |
|---------------------|--|
|                     | 36. Mathews et al., "N-Alkylaminobenzotriazoles as Isozyme-Selective Suicide Inhibitors of Rabbit Pulmonary Microsomal Cytochrome P-450" <u>Mol. Pharmacol.</u> 39(10):25-32 (1986)  |
|                     | 37. Misumi et al., "The p2 <sup>gag</sup> Peptide, AEAMSQVTNTATIM, Processed for HIC-1 Pr55 <sup>gag</sup> was found to be a Suicide Inhibitor of HIV-1 Protease" <u>Biochem. Biophys. Res. Commun.</u> 241(2):275-280                                     |
|                     | 38. Nicolaou et al., "Combinatorial Synthesis Through Disulfide Exchange: Discovery of Potent Psammaplin A Type Antibacterial Agents Active against Methicillin-Resistant Staphylococcus Aureus (MRSA)" <u>Chem. Eur. J.</u> 7(19):4280-4295 (2001)        |
|                     | 39. Nicolaou et al., "Synthesis and Biological Evaluation of Vancomycin Dimers with Potent Activity against VANCOMYCIN-Resistant Bactewria: Target-Accelarated Combinatorial Synthesis" <u>Chem Eur. J.</u> 7(17):2824-2843 (2001)                         |
|                     | 40. Pollack, S. J. et al., "introduction of Nucelophines and Spectotroscopic Probes into Antibody Combining Sites" <u>Science</u> 242:1038-1040 (1988)   |
|                     | 41. Ramstrom and Lehn, "In Situ Generation and Screening of a Dynamic Combinatorial Carbohydrate Library against Concanavalin A" <u>ChemBioChem</u> 1:41-48 (2000)   |
|                     | 42. Sannes-Lowery et al., <u>Trends Anal. Chem</u> 19(8):481-491 (2000)  |
|                     | 43. Shuker et al., "Discovering High-Affinity Ligands for Proteins: SAR by NMR" <u>Science</u> 274 (5292):1531 (Nov. 1996)   |
|                     | 44. Stanojevic and Verdine, "Deconstruction of GCN4/GCRE into a monomeric peptide-DNA complex" <u>Nature Structural Biology</u> 2(6):450-457 (June 6, 1995)  |
|                     | 45. Thompson et al., "Design of potent and selective human cathepsin K inhibitors that span the active site". <u>Proc. Natl. Acad. Sci USA</u> 94:14249014254 (1997)   |
|                     | 46. Wetterau et al., "An MTP Inhibitor That Normalizes Atherogenic Lipprotein Levels in WHHL Rabbists" <u>Science</u> 282:751-754 (October 23, 1998)   |
|                     | 47. Woodcroft et al., "N-Aralkylated derivatives of 1-aminobenzotriazole as isozyme-selective mechanism-based inhibitors of guinea pig hepatic cytochrome P-450 dependent monooxygenase activity" <u>Can J. Physiol. Pharmacol.</u> 68(9):1278-1285 (1990) |
|                     | 48. Zhang et al., "Covalent Modification and Active Site-Directed Inactivation of a low Molecular Weight Phosphotyrosyl Protein Phosphatase" <u>Biochemistry</u> 31(6):1701-1711 (1992)  |
|                     |  |
|                     |  |

W:\DOCS\GRD\GRD-5383.DOC 050201

|  |                 |
|--|-----------------|
| EXAMINER   | DATE CONSIDERED |
| *EXAMINER: INITIAL IF CITATION CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP 609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED, INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT. |                 |